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ABSTRACT

A project team sought to develop a process whereby the Correction Industries Division, Rikers Island, could assist inmates in the maximization of their on-the-job training (OJT) experiences to their benefit in obtaining employment upon release. The team visited industry work sites at Rikers and then selected three work areas for an analysis of tasks: women's sewing, men's tailor, and metal shops. Instead of conducting task analyses, existing V-TECS (Vocational-Technical Education Consortium of States) task lists were selected for a comparison with the actual tasks conducted in these three areas. Project team members and instructors identified tasks performed by inmates. A master list of tasks was developed for each of the shops. It was suggested that proficiency records that certify inmate competencies could be filed in the Industries Division's office. Recommendations called for career guidance for inmates to aid in selection of an OJT program, acquisition of V-TECS materials for instructors, task analyses of the remaining OJT industries programs, and planning for the implementation and followthrough for an OJT certification program. (Appendixes, amounting to approximately one-half of the report, contain competency lists.) (YLB)

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RIKERS ISLAND

CORRECTION INDUSTRY PROGRAM

AND

OCCUPATIONAL PROFICIENCY CERTIFICATION

FINAL REPORT

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OCCUPATIONAL PROFICIENCY CERTIFICATION

Introduction

On-the-job training is the oldest method of teaching occupational skills known to mankind. Today, the training received via OJT and apprenticeship programs is still considered by many to offer the highest quality training to a person hoping to enter a trade.

Unfortunately, the use of OJT and apprentice programs is expensive in terms of the time required of a master craftsman on-the-job and the low number of people that can be educated at one time. This was the reason formal instructional programs evolved over the past 75 years.

Related concern with respect to teaching occupational skills is the need to insure that a person who professes to be skilled is really competent. In response to this demand, there has evolved a variety of certifications and licenses for a person to use to exhibit a record of his/her training. However, typically when a person learns on-the-job he/she only take the skills learned with them, but not a record of his/her accomplishments. As a result, a potential employer or customer has to make assumptions about a person's ability. For a person at the job entry level, the need to sell his/her ability without a record to exhibit can be discouraging.

The industries program at Rikers Island offers an inmate the advantages of an OJT program, but like all OJT programs it does not have any formalized certificate of training. The OJT experiences of an inmate is the same as that for the numerous other individuals in OJT situations across the country where OJT is really just work experience when a record is not available to ascertain any proficiencies.

Problem

The objective for this project, as described by Mr. Fred Scaglione, Director, Correction Industries Division, Rikers Island, was to develop a process whereby the Correction Industries Division could assist inmates in the maximization of their OJT experiences at Rikers to their benefit in obtaining employment when released from Rikers. In this charge, the project team had to be sensitive to several realities. First of all, the industries programs at Rikers, as well as at all other penal institutions, had production schedules to maintain in terms of output and inmate hours. Secondly, while the process may be of benefit to all inmates, not all inmates would be disposed to take advantage of the opportunities presented.

Therefore, in the design of a process, several problems had to be addressed. First, and foremost, was what do the inmates learn on the job that is transferable to jobs outside of the institution? If the skills are transferable, then how can the industries program certify that the inmate is proficient? What jobs should the inmate look for? Is there any chance of employment in such jobs?

Procedures

The first step in the project was to conduct a comprehensive review of the literature in order to determine whether or not anyone had established a process to present OJT experiences on a certified record of proficiencies, and whether or not anyone had addressed a similar problem in a penal institution. Although the literature was rich with related information, unfortunately, the search did not

reveal any previous work done on this process, or on work programs in penal institutions.

With the realization that all work had to be original, a plan was established whereby the team would: (a) visit all work sites at Rikers, (b) select two to four shops for a task analysis, (c) match the tasks to occupations, (d) cross-reference the occupations to the Dictionary of Occupational Titles (1977), and (e) provide a mechanism for a certification process based on task proficiencies.

Analysis

On the first visit, the team toured the following industry work sites: bakery, laundry, men's tailor shop, mattress shop, and metal shop. Because of scheduling and time limitations, the team was not able to observe the wood, women's sewing, and print shops, but were given an in-depth description of their activities by Mr. Scaglione.

After the visit, the team selected three work areas for an analysis of tasks; two of which were larger in terms of operations and one which was restricted. This selection allowed examples to be made at either end of a spectrum in order to permit the team to work with a contrasting set of problems.

Task Analyses

The three industry job programs selected for analysis were the women's sewing, men's tailor, and metal shops. The method of analysis considered was to conduct a task list and detail activity for each area. However, in the review of literature, the V-TECS curriculum

materials were found to provide task lists in their curriculum booklets. Several of the curriculums were relevant to the three job programs. Thus, if a procedure could be adapted by using existing materials, then a task analysis by individuals knowledgeable about the process would not be necessary. This would also allow for a faster and broader application of a process for OJT skill certification.

After a phone call to V-TECS to see if the use of their task lists would be permitted for the project, the decision was made to use the materials for several occupations.

The V-TECS materials selected to match against the women's sewing shop were: clothing alterationist; custom dressmaker; homemaker: clothing and textiles; industrial sewing machine operator; and textile production. After a review of the tasks presented in the V-TECS curriculums, the lists for industrial sewing machine operator, homemaker: clothing and textiles, and clothing alterationist were selected for comparison to the actual tasks conducted in a women's sewing shop.

For the men's tailoring shop, the V-TECS materials for clothing alterationist, industrial sewing machine operator, and textile production were reviewed. The task lists from the clothing alterationist and industrial sewing machine operator curriculums were selected for a comparison to the OJT experiences.

The metal shop operation was quite limited in the variety of tasks performed in the shop. After a review of four curriculum task lists prepared by V-TECS, the one for metal shop welder was selected

for a comparison of tasks.

Three members of the project team took a list of all of the tasks and visited each shop at Rikers Island. The tasks that were observed by the team members as being performed in the shops were circled. The instructors were then interviewed in order to review the remaining tasks listed to see if an inmate could be involved in the performance of a task. The idea that a person "could" versus "have to" perform the task was important because some activities were not a regular part of the industries program; for example, the women could learn how to work from a pattern if they were inclined to make an effort to extend their time in the shop.

After the tasks were identified, the lists of the three team members were cross checked. A master list of tasks was then developed for each of the shops.

The tasks identified for each of the shops are presented as Appendix A. The lists are presented under the heading of the V-TECS curriculum that was used to obtain them. The number for each task is the number given by V-TECS. Thus, if a number is missing, the task cannot be performed in the shop. Consequently, if the industries program would wish to extend the work experiences in a shop area, the addition of the deleted tasks would be the most efficient step to take first.

For the women's sewing shop, the industrial sewing machine operator occupational area included most of the tasks listed for: operation; maintaining equipment and work station; and constructing apparel—pants, gym shorts, nightgowns, robes, shirts. For clothing

alterationist, the women's sewing shop could cover most tasks related to fitting garments, and to alter coats and lining, pants, bodices, skirts, sleeves, hems, collars, garment shape, fullness, closures and fasteners, waistbands, belts, belt loops, plus repair clothing and all miscellaneous tasks. When the tasks for homemaker: clothing and textiles were checked, an inmate could perform a number of the tasks in the shop although not as many as in the other two occupational areas.

The women's sewing shop also made other items not listed by V-TECS. Because the construction of these items would involve the same tasks as those required for the other jobs, a list of tasks for each was not made but rather the additional items are given at the end of the competencies provided for industrial sewing machine operator.

The list of equipment an inmate could learn to use is also presented for each shop. Some of the equipment is more sophisticated than others, but all operations are relevant to the job training experience. An indication of experience in the use of machines would be helpful to a potential employer.

The men's tailor shop was compared to the task lists, and as shown in Appendix A, the shop allows for the learning of a large number of tasks presented by the V-TECS for industrial sewing machine operator occupation for the operation and maintenance of machines. The garments made in the tailor shop are basic flat items except for hats and are noted. The machines used by inmates in the shop are also listed at the end of the competency list.

Finally, in the metal shop the tasks were limited to only the V-TECS list for welder (see Appendix A). These tasks, while basic and not large in number, offer considerable potential to a trainee. The items made in this shop were iron bed frames.

Certification Process

When compared to the tasks taught in corresponding vocational programs, the tasks performed by inmates on-the-job are most definitely transferable. The OJT programs involve a large percentage of those skills required in a specific occupation and, without question, provide an inmate with a potential for employment when released.

If a person is considered to be proficient in performing a number of occupational skills and can present a potential employer with a document that certifies their competencies, then a potential employer can compare the person's abilities to their needs. While such a document may not be the same as an official educational transcript, it at least is better than having the person trying to sell a potential employer on their skill abilities.

Consequently, if a prison shop instructor can ascertain that an inmate has demonstrated proficiency in doing a task, that instructor can make an appropriate indication on a master sheet to be filed in the Industry Division's office. At the time of the person's release from Rikers, the Industry Division can provide the person with a copy of his/her proficiency record with an official seal. As with any license or transcript, which indicates a learning experience has taken place, the employer may accept or reject a person's proficiency certificate.

In addition to the record of competencies, an instructor may indicate for the record whether a person has operated any of the equipment and/or personally made any of the items listed. Such information could be of great assistance to a potential employer.

Identification of Jobs

The V-TECS materials are related to the Dictionary of Occupational Titles, which provides the descriptions of job duties for 20,000 occupations. For those OJT programs in which a V-TECS task list is not available, the index of the Dictionary of Occupational Titles can easily be referenced.

For example, the occupation code number for sewing machine operators is 786 , and this number is extended in order to break down the variety of jobs concerned with operating sewing machines. Each of the digits in a number for an occupation has a specific meaning and the process is described in detail in the D.O.T. These job code numbers are then used in the Occupational Outlook Handbook, which describes the potential for employment in the occupational area plus other related information about the job and working in the occupation.

The information from the Dictionary of Occupational Titles and the Occupational Outlook Handbook should be made available to inmates as they enter an OJT program. This can assist them in their effort to work toward the development of the skills related to their interests, help them in their planning to look for a job, give them the names used for jobs by employers in an occupational area when advertising

an opening in a newspaper, plus related information that may serve to motivate them toward the development of their skills.

Recommendations

In the implementation of a certificated OJT program, several suggestions are made:

1. The program will not be of interest to all inmates, but should be made available to those interested in such an opportunity, especially at the beginning of the program. Enthusiastic and successful trainees will establish a positive perception by the inmates for the program more quickly than any promotion campaign can accomplish.

2. Inmates interested in such a program of training should be given some career guidance and opportunity for selection of an OJT program.

3. A set of the V-TECS materials should be obtained. The curriculum outlines and related task lists will prove to be beneficial to all instructors. The training components would also be quite relevant to their positions as instructors.

4. As an inmate becomes proficient in a task and has had an opportunity to practice that task, they should be moved to new tasks. Realizing that this may be disruptive, a schedule should be established for the rotation of those people in the OJT certification program.

5. A task analysis for the remaining OJT industries programs should be conducted, and other work programs (e.g. custodial and foods) in the institution should be considered for OJT certification.

6. The format for the certification of proficiencies should be established with care so that they cannot be duplicated, extended, or falsified.

7. Publicity for the program is essential in order to assist those who will earn a certificate and to promote the program with the inmates. Initially, the copies of press releases could be attached to the OJT certificates to be used by the inmate when released.

8. The extension of the industries programs into new product lines should consider new tasks to be learned in the V-TECS materials as well as the product to be made. By an addition of certain tasks, an inexpensive extension of the OJT certification program into new product areas can be accomplished. Consultants from the skill trade areas could be invaluable here.

9. External support from public and private foundation funds should be sought. The new federal vocational education act specifies that funds should be made available by states for such prison programs. In addition, possibilities for assistance through labor funds, specifically JTPA, should be examined.

In conclusion, the strong potential for an OJT certification program to be successful and popular must be recognized. Not only does it provide an opportunity for recognized skill training, but it also allows an inmate to take positive action toward their own personal development. Such action may have been believed to be an impossible part of their lives ever again, and the success, or failure in such an endeavor will have considerable psychological impact. Thus, the implementation and follow-through for an OJT certification program must be carefully planned.

APPENDIX A

WOMEN: INDUSTRIAL SEWING MACHINE OPERATOR COMPETENCIES

Operating Industrial Sewing Machines

01. Adjust chairs
02. Place bobbin on bobbin winder
03. Tie on thread, and thread sewing machine
04a. Insert bobbin in bobbin case
04b. Replace bobbin in case and bring up bobbin thread
06. Activate sewing machine by using coordinated knee and foot control
07. Apply motion economy principles while handling materials
08. Guide fabric under feed dog and stitch materials at high speed
09. Position, stitch, and dispose materials pieces
10. Tie bundle, and record production on production sheet
11. Deactivate machine by using coordinated knee and foot control
12. Match markings, such as drill holes on material
13. Hold pieces of material properly
14. Inspect completed garment pieces
15. Guide material through and/or under attachment
16. Start and stop stitching at exact points in operation
17. Change needles
18. Maintain correct seam allowance
19. Gain and maintain speed in stitching
20. Stitch accurately
21. Match and position pieces of garments
22. Estimate distance to begin stitching from starting and stopping edge
23. Sew hard-to-handle materials

24. Manipulate material by coordinating eye, hand, feet and leg motions

25. Back tack parts of garments, such as labels and belt loops

26a. Set and stitch garment fasteners (buttons)

26b. Set and stitch garment fasteners (zippers)

26c. Set and stitch garment fasteners (snaps)

27. Make production on specialized equipment, such as buttonholes and embroidery

28. Sew curved edges

29. Combine components of garments, such as collars, yokes and bindings

31. Stitch darts

32. Blindstitch hems

33. Topstitch garments

34. Joined curved seams

35. Pick up garment pieces simultaneously

36a. Sew square corners

36b. Sew square corners (continuous stitching)

37. Sew irregular shaped garment pieces

39. Turn under and stitch hem on small pieces simultaneously

40. Chain off correctly

41. Sew straight seams without unnecessary stops

42. Sew straight seams

43. Operate butterfly knife

45. Bottom hem-dress leisure jacket

46. Change center and corner knives

48. Activate machine by using finger control

51. Push automatic button

52. Trim off excess material from garment

53. Initial bundle tickets to identify operation performing work

Maintaining Equipment and Work Station

01a. Add oil to maintain oil level (reservoir)

01b. Add oil to maintain oil level (lubrication points)

02. Clean lint from machine

03. Replace light bulb

04. Clean work area floor

05. Replace machine needles

06. Adjust tension

07. Report major machine adjustments to supervisor

09. Adjust knife spring

10. Wipe machine head clean

11. Sweep under treadle

12. Clean work aid bins

18. Report major machine adjustment to mechanic

Constructing Apparel - Pants

01. Sew curtain to right side of right fly

02. Size and cut zipper

03. Sew zipper to left side of right fly

04. Serge left fly

05. Sew facing to front pockets

06. Turn front pockets

07. Construct band loops

08. Cut and sort loops

12. Attach back crotch lining
14. Press pellon to front pockets
19. Serge front inseam
20. Serge back inseam
21. Hang back pockets
22. Finish back pockets
25. Sew side seams
29. Bar tack pockets
30. Restitch front pockets
31. Tack loops to top and bottom of band
32. Attach band and loops
34. Press band seams and fly
35. Sew and turn top and bottom of fly extension
36. Stitch down right fly to finish right corner
38. Stitch down left fly
39. Stitch seat seam
42. Stitch buttonhole
43. Blindstitch curtain
44. Topstitch pants
45. Tack back loop
47. Trim excess threads and fabric pieces
48. Press tops
49. Press legs
50. Inspect and remove lint and threads
51. Hem bottom on pants
52. Tack loop and crotch onto pants

55. Attach slide and stop on pants
56. Hem front and back pockets on pants
57. Attach left fly on pants
58. Finish left fly on pants
59. Sew right fly on pants
60. Join crotch on pants
63. Finish band ends on pants
64. Tack loops, pockets, legs or fly on pants
65. Attach snaps on pants
67. Sew band on pants
68. Set front and back patch pockets on pants
69. Set snaps on pants
70. Cut off band ends on pants
71. Sew down and join fly on pants
72. Turn pants
73. Serge bottom of pants
74. Finish band ends on pants

Constructing Apparel - Gym Shorts

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01. Core legs on shorts
02. Join fronts
03. Box elastic
04. Stitch inseam
05. Set label on shorts
06. Hem legs on shorts

Constructing Apparel - Nightgowns

04. Join shoulder seam (right)

05. Serge neck

07. Join shoulder seam (left)

08. Bind armhole

09. Merrow yoke front to skirt

11. Merrow back yoke to skirt

13. Close side 1

14. Close side 2 and attach label

15. Hem bottom of nightgowns

16. Bar tack shoulder and underarm

17. Trim nightgowns

18. Set sleeves on gown

19. Dart front on gown

20. Bind neck on gown

22. Bar tack bow to gown yoke

23. Bar tack hem on gown

Constructing Apparel - Robes

01. Stitch collar to liner

02. Close ends of collar

03. Attach pellon to collar

04. Turn robe collar

05. Edge facings

06. Attach collar to neck edge

07. Attach facings

08. Shirr top of raglan sleeve

09. Attach pocket to right front

10. Join back and front to sleeve

11. Close sleeve and side seam

12. Set male grippers

13. Set female

14. Hem robe bottom

15. Hem robe sleeve

16. Stay stitch robes

17. Sew button holes on robes

Constructing Apparel - Shirts

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01. Make collar

02. Make collar yoke

03. Join collar to yoke

04. Make front facing

05. Attach facing to right shirt front

06. Make back shirt yoke

07. Join back shirt yoke to shirt back and sew label

08. Join shirt shoulders

09. Set on shirt collar

10. Set on shirt cuff

11. Sew in shirt sleeves

12. Close sleeves and sides

13. Hem shirt bottom
14. Make shirt buttonholes
15. Sew on shirt buttons
17. Flap top stitch on shirts
18. Turn flap on shirts
19. Run flap on shirts
20. Run cuffs on shirts
23. Trim neck on shirts
24. Turn pockets and hem shirts
25. Make repairs to pockets on shirts
26. Set pockets on shirts
27. Make cuffs on shirts
28. Turn and press collars on shirts
29. Turn and press cuffs on shirts
30. Topstitch collars on shirts
31. Make epaulet on shirts
32. Make flaps on shirts
33. Sew stay pockets on shirts
34. Gauge collars on shirts
35. Attach collar to band on shirts
38. Sew pockets on shirts
39. Run and topstitch flaps on shirts
41. Block overdowns on shirts
42. Set and topstitch yokes on shirts
43. Run collars on shirts
44. Close shirt collars on shirts
45. Attach flap on pocket to front of shirts
46. Attach facing to sleeve and close sleeve on shirt
47. Turn, measure and trim collar on shirts
49. Hem pockets on shirts
50. Sew pockets on front of shirts
52. Press shirts
53. Fold shirts
54. Trim and inspect shirts

NOTE: OTHER CONSTRUCTING APPAREL

- Laundry Bags
- Pillow Cases
- Mattresses
- Curtains

EQUIPMENT

1. Electric Sewing Machine
2. Buttonhole Machine
3. Button Machine
4. Blind Stitch Hemmer
5. Snap Machine
6. Surger
7. Cutter
8. Iron Press

WOMEN: CLOTHING ALTERATIONS COMPETENCIES

FITTING GARMENTS:

4. Add Thread Marks
5. Baste to Fit
6. Chalk to Fit
7. Pin to Fit
8. Level Hemline

ALTERING COATS AND LININGS:

12. Alter Width of Coat Back
13. Shorten Vent
14. Lengthen Coat
15. Shorten Coat
17. Narrow Lapels

ALTERING PANTS:

18. Decrease Crotch
19. Increase Crotch
20. Increase Waist
21. Decrease Waist
22. Lengthen Pants
23. Shorten Pants
24. Add Flare to Pants Legs
25. Remove Flare
26. Shorten Rise
27. Reposition Crease
28. Remove Cuffs
29. Widen Cuffs
30. Narrow Cuffs

ALTERING BODICES:

31. Add Gussets
32. Enlarge Armscyes
33. Decrease Armscyes
34. Raise Neckline
35. Lower Neckline
36. Shorten Bodice
37. Lengthen Bodice
38. Decrease Bust
39. Increase Bust
40. Narrow Shoulder Lines

ALTERING SKIRTS:

41. Lengthen Skirt
42. Shorten Skirt
43. Increase Hip
44. Decrease Hip
45. Increase Waist
46. Decrease Waist of Skirt
47. Decrease Waist of Skirt and Bodice
48. Taper Skirt
49. Raise Waistband
50. Lower Waistband

ALTERATING SLEEVES:

51. Increase Width of Sleeves
52. Decrease Width of Sleeves
53. Lengthen Coat Sleeves
54. Lengthen Lining of Vented Sleeves
55. Shorten Sleeves
56. Widen Sleeve Linings
57. Narrow Sleeve Linings
58. Add Cuffs
59. Remove Cuffs
60. Narrow Cuffs
61. Lengthen Cuffs
62. Shorten Cuffs
63. Shorten Wristlets

ALTERATING HEMS:

64. Even Hem Width
65. Interface Hem

ALTERATING COLLARS:

68. Shorten Collar
69. Remove Collar
70. Lower Collar
71. Raise Collar
72. Add Collar
73. Understitch Collar

ALTERING GARMENT SHAPE:

74. Reshape Darts
75. Change Length of Darts
76. Add Darts
77. Remove Darts
78. Change Width of Darts
79. Redirect Darts
80. Remove Tucks
81. Add Tucks

ALTERING GARMENT FULLNESS:

82. Remove Pleats
83. Restyle Pleats
84. Decrease Width of Pleats
85. Increase Width of Pleats
86. Add Gathers
87. Redistribute Gathers

ALTERING CLOSURES AND FASTENERS:

88. Remove Buttons
89. Sew on Buttons
91. Add Snap
92. Remove Snap
93. Add Thread Loop
94. Add Hook and Eye
95. Remove Hook and Eye
97. Lengthen Placket
98. Lengthen Fly

ALTERING WAISTBANDS, BELTS, AND BELT LOOPS:

100. Increase Width of Waistband
101. Decrease Width of Waistband
102. Add Elastic
103. Remove Elastic
104. Add Belt Eyelet
105. Lengthen Belt
106. Shorten Belt
107. Add Belt Loops
108. Remove Belt Loops
109. Shorten Belt Loops
110. Lengthen Belt Loops

PERFORMING MISCELLANEOUS TASKS:

111. Shorten Straps
112. Add Pocket
113. Remove Pocket
114. Decrease Size of Pockets
115. Add Facing
116. Add Trim
117. Press Altered Area
118. Prepare Alteration Ticket
119. Record Completed Alteration

REPAIRING CLOTHING:

120. Replace Broken Stitches
121. Repair Frayed Buttonhole
122. Reinforce Seam
123. Repair Frayed Seam Allowance
126. Repair Trim
127. Turn Cuffs

WOMEN: CLOTHING AND TEXTILES COMPETENCIES

ALTERING CLOTHING:

03. Alter hem by lengthening
04. Alter hem by shortening
07. Fit garment for alteration
08. Lengthen sleeves
09. Let out seam
11. Shorten sleeve
12. Take up seam
13. Taper seam

MAKING CLOTHING:

03. Apply interfacing
06. Attach elastic waistband
10. Determine pattern size
11. Ease/gather fullness into seam
12. Finish raw edges
13. Fit garment
14. Hem garment
15. Make belt
16. Make belt loops/carriers
18. Make buttonholes
20. Make casing (drawstring, elastic)
21. Make collar
22. Make dart
23. Make facings (neck, armhole, waistline)
24. Make front hip pocket
25. Make inseam pocket
26. Make patch pocket
29. Make seam (i.e., french flat felled)
32. Make tuck
33. Make waistband
36. Put in sleeve, dolman
37. Put in sleeve, raglan
38. Put in sleeve, set-in
39. Put in zipper, fly front
42. Put in zipper, separating
46a. Sew on buttons
47a. Sew on snaps/hooks and eyes
48. Sew on tape fasteners (i.e., velcro, snaps, hooks, and eyes)

CONSTRUCTING GARMENTS:

01. Make apron
02. Make bathrobe
03. Make blouse
08. Make dress
10. Make house slippers
13. Make jumpsuit
15. Make nightgown
17. Make pants
21. Make shirt
22. Make skirt

MEN: INDUSTRIAL SEWING MACHINE OPERATOR COMPETENCIES

Operating Industrial Sewing Machines

01. Adjust chairs
02. Place bobbin on bobbin winder
03. Tie on thread, and thread sewing machine
04a. Insert bobbin in bobbin case
04b. Replace bobbin in case and bring up bobbin thread
05. Position bundle cart, untie, separate, and position bundles
06. Activate sewing machine by using corrdinated knee and foot control
07. Apply motion economy principles while handling materials
08. Guide fabric under feed dog and stitch materials at high speed
09. Position, stitch, and dispose materials pieces
11. Deactivate machine by using coordinated knee and foot control
12. Match markings, such as drill holes on material
13. Hold pieces of material properly
14. Inspect completed garment pieces
15. Guide material through and/or under attachment
16. Start and stop stitching at exact points in operation
18. Maintain correct seam allowance
19. Gain and maintain speed in stitching
20. Stitch accurately
21. Match and position pieces of garments
22. Estimate distance to begin stitching from starting and stopping edge
23. Sew hard-to-handle materials
24. Manipulate material by coordinating eye, hand, feet and leg motions
25. Back tack parts of garments, such as labels and belt loops

26a. Set and stitch garment fasteners (buttons)

26b. Set and stitch garment fasteners (zippers)

26c. Set and stitch garment fasteners (snaps)

27. Make production on specialized equipment, such as buttonholes and embroidery

28. Sew curved edges

29. Combine components of garments, such as collars, yokes and bindings

30. Attach brand name tags to finished garments

31. Stitch darts

34. Joined curved seams

35. Pick up garment pieces simultaneously

36a. Sew square corners

36b. Sew square corners (continuous stitching)

37. Sew irregular shaped garment pieces

38. Stitch exact contour of design to applique a design on material

39. Turn under and stitch hem on small pieces simultaneously

40. Chain off correctly

41. Sew straight seams without unnecessary stops

42. Sew straight seams

43. Operate butterfly knife

44. Dispose garment pieces with one hand

46. Change center and corner knives

48. Activate machine by using finger control

52. Trim off excess material from garment

Maintaining Equipment and Work Station

02. Clean lint from machine

04. Clean work area floor

06. Adjust tension

07. Report major machine adjustments to supervisor

08. Clean knife

09. Adjust knife spring

10. Wipe machine head clean

11. Sweep under treadle

12. Clean work aid bins

16. Cover machine before leaving work

17. Sew cloth under machine between foot and arm of machine to catch excess oil before leaving work

18. Report major machine adjustment to mechanic

Equipment

01. Shears - large scissors

02. CRA appliance spreader

03. Straight edge blade (9-inch) for cutting

04. Four inch round blade

05. Drill punch

06. Surging

07. Single straight lock stitch

08. Vent machine

NOTE: APPAREL CONSTRUCTED

- ☐ Sheets
- ☐ Pillow Cases
- ☐ Towels
- ☐ Huck Towels
- ☐ Hats

WELDING COMPETENCIES

8. Set up and tack weld tee joints.

11. Set up and tack weld open butt joints.

12. Set up and tack weld corner or edge joints.

13. Set up and tack weld in the flat position.

14. Set up and tack weld in the horizontal position.

15. Set up and tack weld in the overhead position.

17. Set up and tack weld lap joints.

21. Clamp metal work to prevent distortion and tack weld.